Work Order I March-01-13 1:52:0				*970	360* 				5.155 5 . 1.1 1	 .	Page 1
Revision ID:	065-5 Leg	·		Accept	*N900	<u>)</u> 040	100)* s	etup Star Stop	I W	S1* S2*
Start Date: 3/01 Required Date: 4/08 Reference:		rt Qty: 50.00 q'd Qty: 50.00	*50* *50*		Cust Item Customer:			•			
		•	Date: 3-03-0			Date:		R	un Star Stop	[7]	R1* R2*
Sequence ID/ Work Center ID		eration cription		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision	Nbr			The state of the s						
D3065	Rev B				w =						
*100 *100* Waterjet FLOW CNC Waterjet	FLO	W WATER JET Memo I-Cut as per if necessary	Dwg D Dwg Rev:	0.00 0.00 Prog Rev: <u>B</u>	2-Deburr			_50_	<u>6</u>		Jm13-5-
*110 *110* oc	QC2	- Inspect parts off m	achinė FAI/FAIB	0.00 0.00				50	_0		Jm 13-5-
Quality Control		Memo						·			
120 *120*	QC8	- Inspect parts - seco	and check	0.00	S			50			į.
QC ·		Memo		0.00							

Quality Control

												DQA:	Da	ite:	
NCR:	Yes	/ No				WORK ORDER NON-C	O	NFORM	MANCE / UPI	DATE		•		_	
		,							•			QA Closed:	Da	ite:	
						DISPOSITION				AGAINST (ЭΕI	PARTMENT	PROCESS		
Work Ord	er: -				<u>_</u>	Rework	1		Skid-tube	Crosstube	\neg	1	Water Jet		Engineering
David	N1 -					 	1	1	Machining Vacanting	Small Fab	\dashv	Pro	d. Eng. Coor.	-	Quality
Part i	NO					Scrap Use-as-is		1	noforming	Finishing	-	4	e/Packaging	-	Other
NCR	No					Work Order Update	-		Large Fab	Composite	\dashv	i Nec/Stoi	Supplier	_	
IVER	NO					Work Order opdate	נ		Earge Tab	composite	نـــ	i	Supplier	ш	لــا
Root			-		Descri	ption of work order update		Initial	Act	ion		Sign &			
Cause	l	Date	Step	Qty		or Non-conformance	Cr	nief Eng	Descr	ription	-	Date	Verificatio	n	QC Inspector
Doc/Data	П														
Equip/Tooling	П		ļ								ı				
Operator											ì				
Material	П														
Setup						•									
Other															
Process															
Supplier	Ш														
Training	Ш														
Unapproved							<u> </u>					<u> </u>			
							AUI	LT CATE	GORY						M 4445
Landi					_	General		1		г		7			1 .
	Н	Bending				Bend		Grain		1		Ovalized			Pressure/Forced
	-	Centre No	ot Concer	ntric to	o/s	BOM/Route	_	Hardwa].		Over/Under			Temperature/Cure
	\vdash	Cracks				Broken/Damaged		4	on Incomplete	1		Part Incorre		\vdash	Weld
	-	Crushed/	Crimped.			Burrs	<u> </u>	-	ions Incomplete/l	Jnclear		Part Lost/Mi	ssing		Wrong Stock Pulled
1	1 1	Cuffs				Contamination	1	Mainte	enance			Part Moved			

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde		960			2							
Item ID: Revision ID: Item Name:	D3065-5 Step Leg			Accept	*N900	040 <i>°</i>	1೧೧*	Set	tup Start Stop		S1* S2*	
Start Date: Required Date: Reference:	3/01/13 4/08/13	Start Qty: 50.00 Req'd Qty: 50.00	*50* *50*		Cust Item I Customer:	D:			C44			
Approvals:		n:	Date:	Tooling: SPC (Y/N):		ate:ate:		Ru	n Start Stop	*NI *NI	R1* R2*	ļ
Sequence ID/ Work Center II 130 *130* HandFinish Hand Finishing	D	Operation Description Chemical Conversion Con Memo	at per QSI005 4.1	Set Up/ Run Hours 0.00	Tool ID		Code (Accept Oty		Reject Number 13:5	Insp. Stamp	
140 *1111 * QC Quality Control		QC3 Inspect Part Finish Memo		0.00 SAS 27 0.00 B S	3		<u>-</u>	50 lun				
150 *150* Packaging		ldentify as per dwg & Sto	ock Location SA	0.00			.a.	50				86.5/2

Packaging

			DQA:
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE	

IVCK.	es / NO				WORK ONDER WORK	.0141 01		<i></i>	QA Closed:	Date:	
Work Orde	er:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part N	lo				Rework Scrap	The	Skid-tube Machining	Crosstube Small Fab Finishing	⊣	Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other
NCR N	lo				Use-as-is Work Order Update] ine	rmoforming	Composite	Rec/stoi	Supplier	J Other
Root				Descri	ption of work order update	Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chief En	g Desc	ription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other			ļ								
Process											
Supplier											
Training		ļ	.							·	
Unapproved			<u> </u>						<u> </u>		
					·	AULT CAT	EGORY				
Landir	ng Gear				General	 -		_	7	_	7
	Bending				Bend	Grain			Ovalized		Pressure/Forced
	Centre No	ot Concei	ntric to O	/S	BOM/Route	Hardy		_	Over/Under	<u> </u>	Temperature/Cure
]	Cracks				Broken/Damaged	_	ction Incomplete	_	Part Incorre	├	Weld
]	Crushed/	Crimped.	-		Burrs	_	ctions incomplete/	/Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs				Contamination	\vdash	tenance	<u> </u>	Part Moved		
. [Heat Trea				Countersink	Misla	beled		Positioned \		- 1
	Inspectio	n Strip in	Tube		Cut Too Short	Misre	ad		Power Loss/	Surge	Other
	Ripples in	Bend		L	Drill Holes	Offse	t				
	Torque W	/aves in E	extrusion	L	Drawing	Out c	f Calibration				
	Turning S	equence			Finish	Out o	f Sequence				

Outside Dimensions

_Date: ____

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ord March-01-13 1		7960		*979	A60*							Page 3
Item ID: Revision ID: Item Name:	D3065-5 Step Leg			Accept	*N900	040	100)*	Setup	Start Stop	1.71	S1* S2*
Start Date: Required Date Reference:	3/01/13 :: 4/08/13	Start Qty: 50.00 Req'd Qty: 50.00	*50* *50*		Cust Item I	D:						
Approvals:	Process Pl	lan:	Date:	Tooling: SPC (Y/N):		nte:			Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center I	ID .	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accep Qty	t Re Qt	•	Reject Number	Insp. Stamp

0.00

Memo

Quality Control

1325-24

									DQA:	Date:	
NCR: Y	es / No				WORK ORDER NON-C	ONFOR	MANCE / UPD	DATE			
									QA Closed:	Date:	
Work Orde	ar:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
WOIK OIGE					Rework	1	Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo.				Scrap		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
,					Use-as-is		moforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	lo				Work Order Update		Large Fab	Composite		Supplier	
Root		T		Descri	ption of work order update	Initial	Acti	ion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chief Eng	Descri	iption	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling										,	
Operator											
Material											
Setup											
Other						}					1
Process		·									
Supplier											
Training											
Unapproved		<u> </u>	<u> </u>			<u> </u>	<u></u>				
						AULT CATE	GORY				
Landir	ng Gear				General	<u></u> .		<u> </u>	ا ما]p /Farand
	Bending				Bend	Grain		·	Ovalized		Pressure/Forced
	Centre N	ot Conce	ntric to	o/s	BOM/Route	Hardw		-	Over/Under	 	Temperature/Cure Weld
	Cracks			<u> </u>	Broken/Damaged		ion Incomplete	–	Part Incorre	⊢	╡
}	Crushed/	'Crimped	-		Burrs	-	tions Incomplete/U	inclear	Part Lost/M	_	Wrong Stock Pulled
}	Cuffs				Contamination	\vdash	enance	<u> </u>	Part Moved		
	Heat Tre			\vdash	Countersink	Mislab		<u> </u>	Positioned \		Joshan
	Inspection		Tube		Cut Too Short	Misrea	a	<u> </u>	Power Loss,	'Surge	Other
	Ripples it	n Bend			Drill Holes	Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Page 1

Work Order ID:

97960

Parent Item:

D3065-5

Parent Item Name:

Step Leg

Start Date: 3/01/13

Required Date: 4/08/13

Start Qty: 50.00

Required Qty: 50.00

Comments:

IPP: C02.11.01Incorporated D3066-1 IPPKJ/RF

IPP Rev:D Now on Water Jet 06-04-11 JLM

IPP Rev:E Now manufactured with 6061-T6 06-05-25 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.080 6061-T6 .080 Sheet		Purchased	No			100	sf	1.0000	0.825	4 3.42105 5 44		J	m13-5
3001-10 .080 Sheet				Location		Loc Qty	Lo	c Code					,
				MAT021		1.000032							4
				11728	35	0.497264							
				12457	72	0.502768			i de la companya della companya della companya de la companya della companya dell	7			

124786

124786

NCR:	Yes	/ No				WORK ORDER NON-C	COI	NFORM	MANCE / UPDATE		•		
											QA Closed:	Date:	
Work Ord	er:					DISPOSITION			AGAI	NST DE	PARTMENT	PROCESS	
Part NCR	No.					Rework Skid-tube Crosstube Scrap Machining Small Fab Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite			Fab ning	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
Root			Ţ		Descri	ption of work order update		Initial	Action		Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ct	nief Eng	Description		Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
							AUI	LT CATE	GORY				
Land	ing (1				General		7		_	٦	<u></u>	.
		Bending Centre N Cracks Crushed, Cuffs			o/s	Bend BOM/Route Broken/Damaged Burrs Contamination		-i `	on Incomplete ions Incomplete/Unclear		Ovalized Over/Under Part Incorre Part Lost/M Part Moved	ct	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
		Heat Tre	at		<u> </u>	Countersink	\vdash	Mislabe			Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

DQA:

Power Loss/Surge

Date:

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	97960
Description: Step Leg	Part Number:	D3065-5
Inspection Dwg: D3065 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

16.458 15.750 2.250	+/-0.010 +/-0.005 +/-0.005	15.750"	_		ســـــــــــــــــــــــــــــــــــــ	
		15.750"			T	Jtm06
2.250	+/-0.005		-		T	
		2.253"	-		V	Jemoi
3.460	+/-0.005	3.464"	-		V	
0.865	+/-0.005	0.567`	_		v	
6.020	+/-0.005	6.023"	_		ν	
1.205	+/-0.005	1,206"	_		V	
3.484	+/-0.005	3.485"	_		ν	
0.871	+/-0.005	0.874"	-	·	ν	
8.325	+/-0.010	8.329"	-		ν	Proximos
0.551	+/-0.010	0,556,"	-		V	
0.213	+0.005/-0.000	0.214"	-		ν	
Ø0.128	+0.005/-0.000	0.129"			ν	

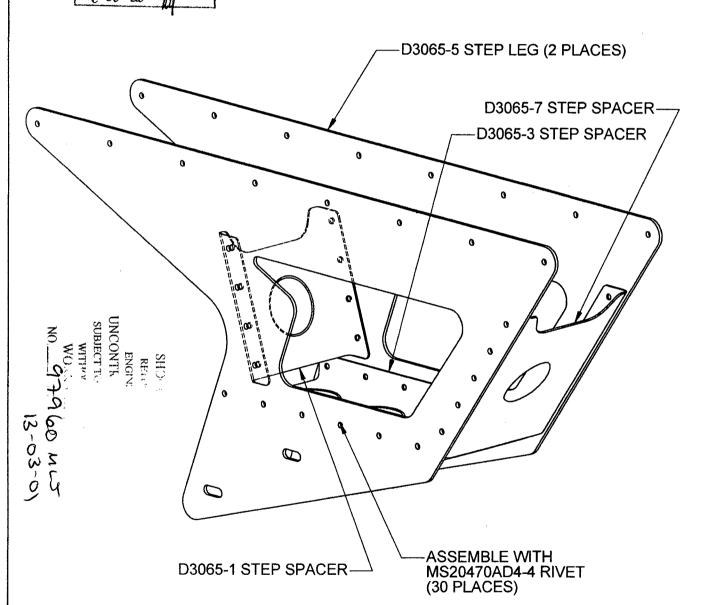
Measured by: Jm	Audited by:	21	Prototype Approval:	N/A
Date: 13-5-2	Date:	13-5-3	Date:	N/A

	Rev	Date	Change	Revised by App	proved
ĺ	Α	03.09.22	New Issue P/O D3065-041	KJ/RF	
Ī	В	04.06.15	Added Ø0.128 dimension	KJ/JLM 1,A	
Ī	С	06.06.23	Dwg Rev. changed	KJ/JLM 🛠	



	DESIGN	DESIGN A DRAWN BY		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	CHECK		APPROVED	DRAWING NO.	REV. B
		PH		D3065	SHEET 1 OF 5
	DATE 06.05.23			TITLE	SCALE
				STEP LEG ASSEMBLY	1:2
	Α	A 02.09.11		NEW ISSUE	
	В	06.05.23		ADD 6061-T6 MATERIAL, ADD SLOTS TO D3065-5	

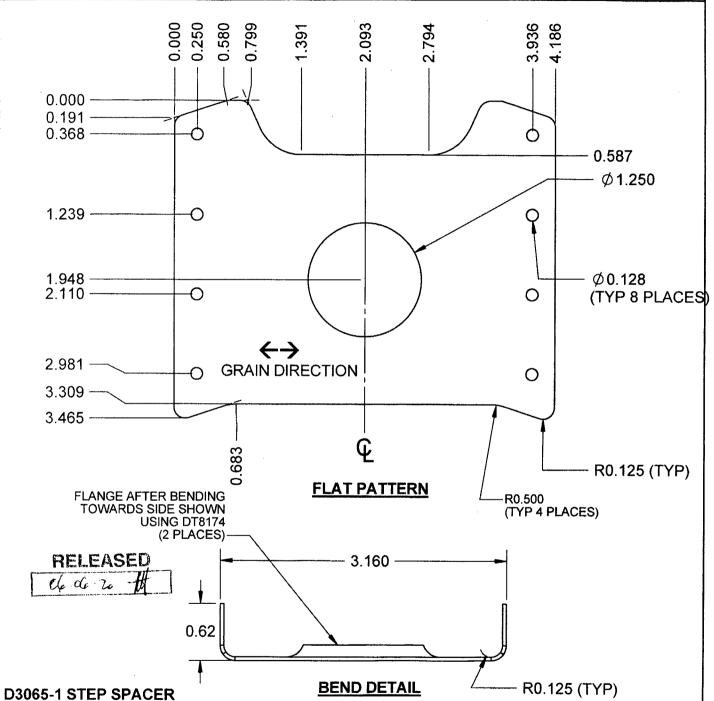
RELEASED 16 c6 20



D3065-041 STEP LEG ASSEMBLY







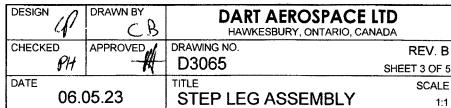
- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

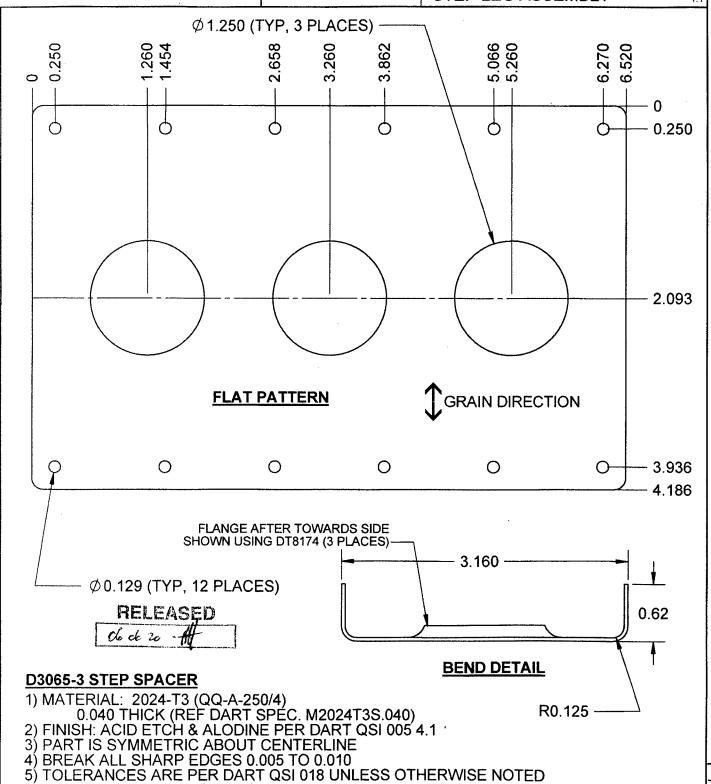
COPYRIGHT © 2002 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED.

OR COMMUNICATED TO ANY OTHER PERSON-WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.







COPYRIGHT © 2002 BY DART AEROSPACE LTD.

6) ALL DIMENSIONS ARE IN INCHES

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

06.05. 7 23 DRAWING NO. STEP DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA Ö **ASSEMBLY** SHEET 4 OF 5 REV. B

SCALE

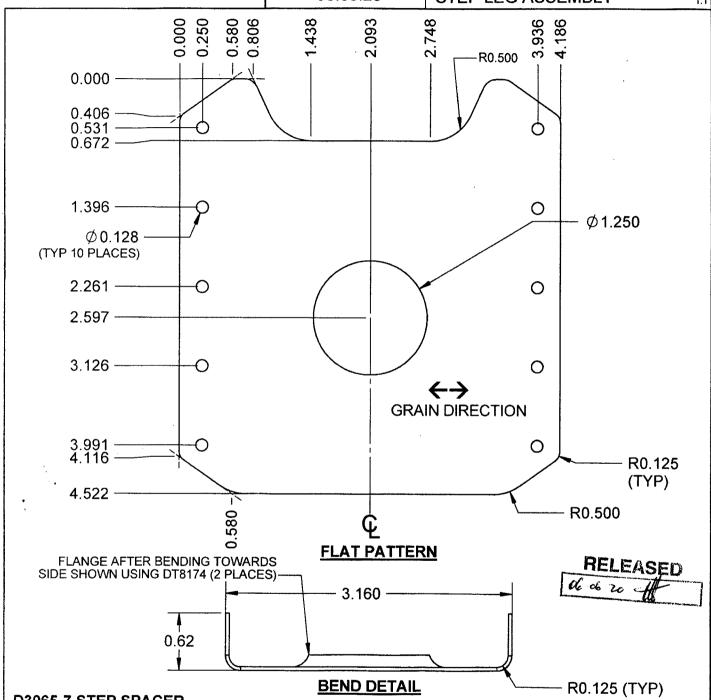
PILEA. 16.458 8 15.750 (2.250 PITCH) Ø 0.128 (DRILL #30) (TYP 23 PLACES) COPYRIGHT ©2002 0 1.640 0 BY DART AEROSPACE LTD. 8.325 3.460 3.484 (0.871 PITCH) (0.865 PITCH) 0.551 SEE 0.741 **DETAIL A** 0.2132.770 6.020 **DETAIL A D3065-5 STEP LEG** (1.205 PITCH) MACHINE PER DWG FILE "D3065-5.SLDPRT" 2) MATERIAL: 6061-T6 (PER QQ-A-250/11 OR AMS 4025 OR AMS 4027) 0.080" THICK (REF DART SPEC M6061T6S.080) 5052-H32 (PER QQ-A-250/8 OR AMS 4016) 0.080 THICK (REF DART SPEC. M5052H32S.080) 3) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1 BREAK ALL SHARP EDGES 0.005 TO 0.010 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN INCHES

SIHI

DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.







D3065-7 STEP SPACER

- 1) MATERIAL: 2024-T3 (PER QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

COPYRIGHT © 2002 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

97960